

July 23, 2002

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**City of
Albuquerque**

**Public Works
Dept.**

**Wastewater
Utilities**

**Pollution
Prevention (p2)
Program**

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Albuquerque, NM
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TTY Users may call
the New Mexico
Relay at:
1-800-659- 8331

Web Page:

www.cabq.gov/p2



P2 in Healthcare

City of Albuquerque, Wastewater Utility
Pollution Prevention (p2) Program

Healthcare & Used Formaldehyde

P2 & Healthcare Facilities

The City of Albuquerque's Pollution Prevention (p2) Program is a free, non-regulatory, technical assistance program.

The p2 Program conducted a sampling study of formaldehyde and derivatives of formaldehyde (such as glutaraldehyde, formalin, etc) discharged to the sanitary sewer system at **eight permitted hospitals in Albuquerque.**

Disposal of formalin to the sewer even with downstream dilution is discouraged in favor of pollution prevention practices which include source reduction, product substitution, and on site recycling

The maximum allowable formaldehyde limit in **Albuquerque's Sewer Use & Wastewater Control Ordinance** is **100 parts per million (mg/l).**

The hazards associated with exposure to formaldehyde and formalin solutions are well defined.

OSHA has adopted the **Formaldehyde Standard** to protect workers from exposure to formaldehyde.

Disposal of formaldehyde as a waste material is not as clearly defined and no uniform standard exists.

Some municipalities prohibit the discharge of formaldehyde to the collection system.

The City of Albuquerque allows discharge of formaldehyde as long as other contaminants are not present; the solutions are in low concentrations such as 2% to 4%. The solutions should be held for 14 to 21 days before discharge. These solutions lose toxicity over time.

The City of Albuquerque's *Southside Water Reclamation Plant (SWRP)* is designed to treat domestic waste.

The SWRP is regulated and tested for state and federal compliance.

Concentrations of formaldehyde that exceed the permitted level could result in fines for the City of

Albuquerque's SWRP.

Best Management Practices:

- # Check the composition of the commercial formaldehyde solution your facility is using by checking the MSDS Sheet
- # Characteristics of formaldehyde that may make it hazardous are ignitability (flash point less than 140 degrees Fahrenheit), corrosiveness, (pH less than ≤ 2), cross contamination with mercury solutions.
- # Have a spill clean up kit ready for formalin solutions readily available.
- # Check the City of Albuquerque's **Best Management Code of Practice for Biomedical Laboratories** for best management practices concerning waste formaldehyde solutions, and the

other resources listed at the end of this newsletter.

The 2002 Study.....

The purpose of the study was to determine if formaldehyde and its derivatives remain present in wastewater after discharge.

The City's study occurred March through April of 2002. Each hospital is permitted and has a monitoring manhole used for sampling wastewater discharges.

Three of the hospitals had multiple sample points. A total of 12 **one day time weight composite samples** were collected during the study.

The results reflect derivatives of formaldehyde present. However, in general formaldehyde and its derivatives do appear to break down over time. The chart shows there was evidence of formaldehyde present in two of the 12 samples collected.

Resources:

Visit these resources for more info about used formaldehyde & derivatives of formaldehyde:

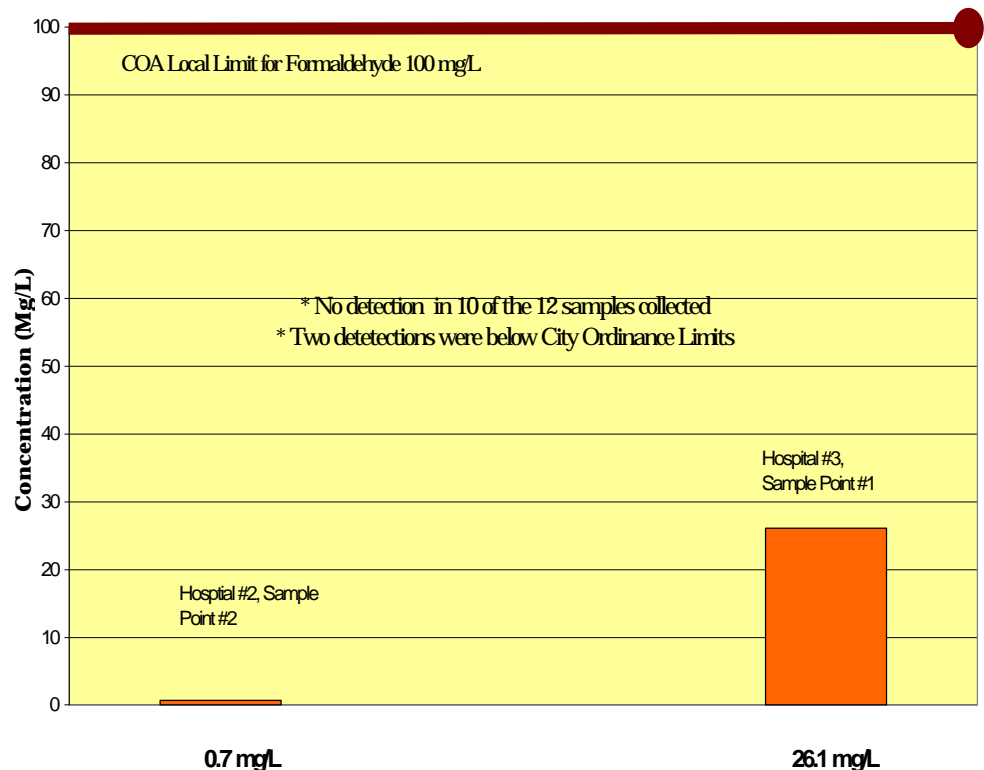
- # Environmental Self Assessment for Healthcare Facilities:
<http://www.dec.state.ny.us/website/ppu/esahcf.pdf>
- # The Nightingale Institute for Health & the Environment:
<http://www.nihe.org/>
- # Physicians for Social Responsibility
<http://www.psr.org/>
- # Healthcare Without Harm:

<http://www.noharm.org/index.cfm>

- # RCRA, Superfund & EPCRA Call Center:
<http://www.epa.gov/epaoswer/hotline/index.htm>
- # City of Albuquerque's Pollution Prevention (p2) Program:
www.cabq.gov/p2
- # Sustainable Hospitals
www.sustainablehospital.org



2002, Formaldehyde Wastewater Discharge Study At 8 Albuquerque Hospitals



Location Sampled: Wastewater Discharge Manhole for Facility (Permitted Sampling Point)

The City of Albuquerque does not promote, recommend, or endorse any particular company, service or product. The information in this newsletter is furnished as a service.